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The Effects of Physical Attractive on the Perception of Mental Illness

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The Effect of Physical Attractiveness on Perceptions of Mental Illness

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Abstract

The following study examined the influence of the Halo Effect, specifically the physical attractiveness stereotype, on perceptions of mental illness. The physical attractiveness stereotype states that individuals who are physically attractive will be attributed positive personality traits. In this study, participants were asked to view either physically attractive or non-attractive individuals while listening to a description of a mental illness attributed to the person shown in the image. It was hypothesized that participants who were presented with physically attractive images would rate the description of mental illness more positively than when viewing images of physically unattractive people. The hypothesis was not found to be statistically significant, based on the results of a three-way ANOVA. However, significant main effects of gender and mental illness were obtained such as that women were rated more positively than men, and depression was rated more positively than schizophrenia.

Effects of Physical Attractiveness on the Perception of Mental Illness

The physical attractiveness of an individual is usually noticeable upon first glance and can influence perceptions of the individual's personality traits. For example, people seen as physically attractive are also often perceived to possess more socially desirable traits such as social competence, kindness, and empathy (Dion, Berscheid, and Walster, 1972). This is one example of the more general phenomenon known as the halo effect, which states that biased judgments of one attribute of an individual, were developed or influenced by another attribute that is usually unrelated (Lai, Wolfe, and Vickers, 2013). This phenomena deals with specifically positive characteristics, such as attractiveness.

Research in the 1970s and earlier has indicated that physical attractiveness does play a role in how others perceive that person, but more recent research has been less supportive. Dion, Berscheid, and Walster (1972) conducted a study that explored the existence of the so-called physical attractiveness stereotype; this research was of the first to name and intentionally study this stereotype. The researchers set out to determine whether or not physically attractive individuals were more likely to be rated higher on socially desirable personality traits and quality of life. They provided each of their participants with three individuals in photographs of varying attractiveness that included attractive, average attractiveness, and relatively unattractive as described by the researchers. Participants viewed the individuals one by one, and then recorded their perceptions of the individual in the image, using two different methods. First, participants completed a 27-item questionnaire. After completing this questionnaire for each of the three images, participants indicated which individual in the image they believed had the most and least of a particular characteristic. These responses measured the personality trait perceptions of the participants including items such as sophistication, warmth, excitability, sincerity, sociable,

friendliness, and social poise. In addition to these specific traits, the researchers gathered the perceptions the participants had of the individuals, in the images, overall life happiness. They asked the participants to select which subject in the photo was the most and least likely to possess a trait that exemplified life happiness.

Overall, the researchers gained support for their hypothesis, for they attained significantly more positive social perceptions for individuals, in the images, that were deemed attractive. However, some results supported the opposite of their hypothesis. For instance, unattractive individuals received more positive ratings of parental competence. Nonetheless, far more findings showed that attractive individuals received more positive ratings in regards to socially desirable traits as well as overall life happiness and success. For example, “social desirability of the stimulus person’s personality,” “total happiness of the stimulus person,” and “social and professional happiness of the stimulus person” were rated more positively for the attractive individuals.

The attractiveness stereotype is robust and has gained support from multiple disciplines (Adams, 1982; Berscheid, 1981; Berscheid & Walster, 1974; Dion, 1981, 1986), but has also been criticized. As stated in the analysis of the Dion, Berscheid, and Walster study, some traits were actually rated more positively for individuals deemed unattractive, such as parental competence. Dion (1981, 1986) suggested that the physical attractiveness stereotype was strongest for specific traits such as social competence and interpersonal ease. Similarly, a study done by Bassili in 1981 suggested that traits such as social vitality and extraversion were most affected by the stereotype.

Eagly, Ashmore, Makhijani, and Longo (1991) conducted a meta-analytic review of research on the physical attractiveness stereotype. The study explored the limitations of previous

research, and hypothesized that attractive individuals will indeed receive more positive traits, but “this tendency will vary considerably as a function of type of evaluative meaning” (Eagly et al., 1972, p. 112). These researchers considered the fact that perceptions of varying attractiveness traits are dependent on the nature of the trait; the hypothesis provided support for this claim. For instance, attribute types such as social competence, adjustment, and potency had larger effect sizes (.68, .52, and .49 respectively) than the traits concern for others and integrity (.01 and .13 respectively). They also discovered other traits that affected the participant’s perceptions. Female images attained higher effect sizes compared to male images. Additionally, images shown to participants in color obtained higher effect sizes than images shown in black in white. The design of the studies also impacted the strength of the stereotype. For instance, when researchers used no control group, they achieved stronger stereotype effects. Likewise, “within-subjects variations of attractiveness produced a stronger stereotype than between-subjects variations” (Eagly et al., 1972, p. 119). Furthermore, when studies provided additional personal information about the images instead of just the images alone, researchers gathered weaker stereotype effects. In contrast, researchers obtained stronger stereotype effects when studies used a larger number of dependent variables.

To summarize, the physical attractiveness stereotype is not as strong as once believed and is probably overgeneralized based upon the findings of Eagly et al.’s meta-analysis (1972). However, the analysis did provide evidence that the physical attractiveness stereotype exists and supports the notion that more attractive individuals are attributed more positive perceptions in regard to social and personality traits.

Other studies have extended the physical attractiveness stereotype and attempted to apply these findings to different aspects of life and social situations. Mental illness is an area in which

the attractiveness stereotype has been studied. Specifically, researchers have examined how family, friends, and clinical support staff have treated individuals who suffer from a mental illness and who receive help at an inpatient facility. Farina, Fischer, Sherman, Smith, Groh, and Mermin (1977), explored the differences of attractiveness between patients of the mental health facilities and a control group containing shoppers at a department store and university employees. They also examined the social consequences for unattractive individuals in the inpatient facilities, by comparing ratings of the control group. They found that the more unattractive the patient was, the more likely they were to be given a more severe diagnosis, the less often they were visited, and the less pleasant they were judged. Furthermore, staff wrote less about unattractive patients in official records compared to the attractive patient's records. Out of these findings, only the number of visits the patient received attained statistical significance.

Martin, Friedmeyer, and Moore (1977), found similar effects of the physical attractiveness stereotype in a clinical mental health setting. They examined at a group of individuals suffering from schizophrenia in an inpatient facility. The researchers had raters report their perceptions of the 77 patients' adjustment. They used two groups of raters. The first group, comprised staff members, rated the attractiveness of patient images and then used a 7-point scale to report their perceptions of the patient's emotional adjustment. The second set of raters included research clinicians that performed interviews, using an 18-item Brief Psychiatric Rating scale to gauge the emotional adjustment of the patients; the research clinicians received no instruction to report the attractiveness of the patients. More attractive patients received more positive ratings in regard to their emotional adjustment.

Other researchers have examined a different aspect of the relationship between physical attractiveness and perceptions of mental illness. Napoleon, Chassin, and Young (1980) examined

at the physical attractiveness of hospitalized patients with a mental illness before and after their diagnoses. They found that less attractive patients received more severe diagnoses and had longer stay times in the inpatient treatment facility.

A majority of the research on the relationship between the physical attractiveness stereotype and mental illness has used mostly inpatient facilities. The present study examined the relationship between the physical attractiveness stereotype and the perception of mental illness. Contrary to previous research, this study gauged the perceptions of individuals' diagnoses with a mental illness who were described as receiving outpatient therapy for their illness, and also focused on clinical symptom management, life happiness, and ability to thrive as a member of society. The hypothesis was that individuals who are deemed physically attractive will receive more positive perceptions of their mental illness than the less attractive individuals.

Method

Participants

The study included 47 undergraduates enrolled in introductory psychology, 34 women and 13 men, who signed up voluntarily for the study in exchange for credit to fulfill a course requirement. The participants were from a variety of majors and ranged in age from 17 to 23.

Materials

Attractive and Unattractive Faces. A separate group of 33 undergraduate students pre-rated 18 female and 18 male faces on attractiveness. The researcher collected the 36 images from the University of Texas at Dallas' Center for Vital Longevity Face Database (Minear & Park, 2004). The images included men and women, color and black/ white options, and many facial expressions. The researcher chose to use both male and female images in color, possessing a neutral expression against a blank background, and of a Caucasian race. The stipulations were

chosen to control for potential confounds created by the race and emotional expression of the image. Additional images were gathered from CrimsonLinks, a website that posts interesting links and ideas. A particular post of the website discussed how to get the most attractive female faces from popular celebrity photographs; the new images were constructed by using face averaging software. Face images of the celebrities were averaged together enough to get an unrecognizable, attractive female face. From all of these images, the four most attractive and the four least attractive images were chosen by averaging the ratings from the participants (shown in Appendix C).

Mental Illness Scenarios. Mental illness scenarios gave a brief summary about a case of depression or schizophrenia ascribed to individuals shown in the digital images. The scenarios described the main symptoms of the disorder, such as lethargy, loss of interest, and weight loss for depression; and disorganized thinking, delusions, and movement disorder for schizophrenia. The descriptions made no reference to the duration of their condition, but did make reference to the fact that they were under the care of a psychiatrist and were clinically diagnosed with the disorder. The full descriptions can be found in Appendix A.

Mental Illness Ratings. The participants responded to seven questions that measured the participant's perceptions regarding the mental illness. These seven questions measured aspects of the participant's perceptions of clinical management (i.e. ability to improve their symptoms), ability to be an active member of society, and ability to attain a life of happiness, using a 5-point Likert scale from 1 (extremely unlikely) to 5 (extremely likely). Total scores were calculated from averaging responses across all seven items, and higher scores represented more positive perceptions of the mental illness. The seven questions in their entirety are shown in Appendix B.

Procedure

The study began with an informed consent and basic demographic survey. Participants viewed four images, two men and two women, which were either unattractive or attractive depending on the assigned experimental condition. As the participants viewed the individuals in the images one at a time, the researcher read a scenario describing the mental illness of the person whose face was shown on the screen. The scenarios were also attached to each image in the participant packet to be used for their own reference. The research did however tell the participants to keep their attention on the photos while being read the description. Participants viewed either attractive or unattractive faces of men and women with schizophrenia and depression. The image/description pairs were counterbalanced throughout the data collection. After viewing each face and hearing their associated description of mental illness, participants answered the seven questions. Participants were blind to the experimental conditions.

Design/Analysis

The research had three independent variables: attractiveness (attractive and unattractive), type of mental illness (depression and schizophrenia), and gender of the individual in the image (female and male). The independent variables mental illness and gender were within subject variables, whereas attractiveness was a between subjects variable. Furthermore, there were seven dependent variables, which were the seven items addressed in the questionnaire. For each dependent variable, a 2 (male/female) x 2 (attractive/unattractive) x 2 (depression/schizophrenia) mixed ANOVA was performed using SPSS, with alpha levels set at 0.05.

Results

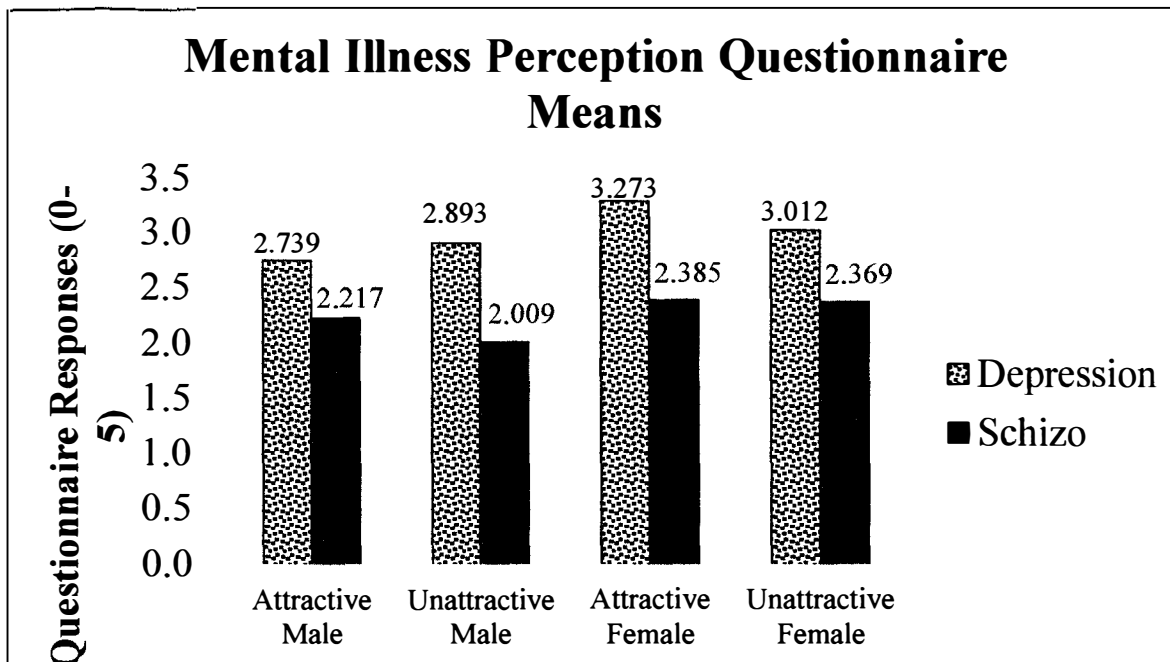
A three-way analysis of variance was conducted on the Mental Illness Perception Questionnaire responses. Results indicated that there was no significant three-way interaction among the physical attractiveness, mental illness diagnoses, and gender of the images, $F(1, 47)$

$= 3.07, p = .09, \eta_p^2 = .064$. Likewise, no significant findings were obtained for any of the two-way interactions (see Table 1).

The main effect of varying physical attractiveness of images was not significant, $F(1, 47) = .352, p = .56$. However, the main effect of the mental illness diagnoses of the image was significant, $F(1, 47) = 53.94, p < .001$. Participants reported more positive perceptions of mental illness for images diagnosed with depression ($M = 2.979$), than images diagnosed with schizophrenia ($M = 2.245$), regardless of the attractiveness of the images. This significance can be observed, with attractiveness accounted for, by comparing the mean rating of the attractive female with depression ($M = 3.27, SD = .808$) and the mean rating of the attractive female with schizophrenia ($M = 2.39, SD = .611$). Furthermore, the main effect of the gender of the images was significant, $F(1, 47) = 21.41, p < .001$. Participants rated female images more positively ($M = 2.760$) than male images ($M = 2.465$), regardless of their attractiveness. For instance, attractive males with depression received a mean rating of 2.74, with a standard deviation of .627, compared to the attractive females with depression who received a mean rating of 3.27, with a standard deviation of .81. The means for each gender and mental illness, both attractive and unattractive are shown in Figure 1. Furthermore, Table 1 displays the three-way ANOVA findings.

Table 1. ANOVA Summary Table

| <i>Sources of Variance</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>P</i> |
|---------------------------------|-----------|-----------|-----------|----------|----------|
| <i>Between Subjects Effects</i> | | | | | |
| Physical Attractiveness | .324 | 1 | .324 | .352 | .556 |
| Error (Physical Attractiveness) | 41.358 | 45 | .919 | | |
| <i>Within Subjects Effects</i> | | | | | |
| Gender | 4.095 | 1 | 4.095 | 21.411 | .000 |
| Gender X Mental Illness | .046 | 1 | .046 | .131 | .719 |
| Error (Gender) | 8.607 | 45 | .191 | | |
| ----- | | | | | |
| Mental Illness | 25.323 | 1 | 25.323 | 53.941 | .000 |
| Mental Illness X Attractiveness | .040 | 1 | .040 | .085 | .771 |
| Error (Mental Illness) | 21.125 | 45 | .469 | | |
| ----- | | | | | |
| Gender X Attractiveness | .146 | 1 | .146 | .761 | .388 |
| Gender X Mental Illness X | 1.084 | 1 | 1.084 | 3.073 | .086 |
| Attractiveness | | | | | |
| Error (Gender X Mental Illness) | 15.870 | 45 | .353 | | |

Figure 1. *Mean Responses Per Attractiveness, Gender, and Mental Illness Diagnoses of Images*

Discussion

The results indicate that no interaction of independent variables significantly affected the perceptions of the individual's mental illness. In contrast, both gender and mental illness diagnoses achieved statistically significant main effects. These results indicate that the physical attractiveness of an individual with a mental illness does not necessarily affect others' perceptions, but the gender of the individual with a mental illness and the type of mental illness are better indicators of others' perception they will receive.

Although the hypothesis of this study did not attain significant results, other significant results offered additional information that was not initially hypothesized. Previously reviewed research had not accounted for gender differences among the perception of mental illness or differences caused by varying types of mental illness. For example, Martin, Friedmeyer, and Moore (1977) as well as by Napoleon, Chassin, and Young (1980) used only women diagnosed

with schizophrenia when they explored the relationship between attractiveness and mental illness perception.

The meta-analysis of the physical attractiveness stereotype research done by Eagly et al. (1991) suggested variables that could affect the perceptions. For instance, when additional information about the individual's in the images was provided (e.g., specific information about an image's mental illness, their socioeconomic status, or family information), the attractiveness stereotype was weaker. In this study, gender and mental illness diagnoses added additional information to participants, and according to these researchers, this could have weakened the effects of physical attractiveness.

Eagly et al. (1991) also suggested that attractiveness as an independent variable produces stronger effects when the variable acts as a within-subjects variable, rather than a between-subjects variable. This can be due to the fact that if a group of participants are only viewing one level of attractiveness, they are not given a contrast of attractiveness that could magnify the attractiveness effect. The researchers also found that color images produced greater effects of the stereotype. Finally, the number of specific perceptions measured impacted the strength of the stereotype when analyzed; a larger number of specific perceptions resulted in a stronger physical attractiveness effect.

Eagly's et al. (1991) meta-analysis highlights why the hypothesis of this study did not gain statistical significance. The current study used physical attractiveness as a between-subjects variable, which according to their research dampens the effect of the stereotype. Furthermore, the current study provided a plethora of information beyond simply showing the images. Specifically, different diagnoses were presented to participants and the participants heard varying symptoms of the two different diagnoses, as shown in Appendix A.

There are many limitations of this study. First, all unattractive individuals were comparably unattractive, whereas within the attractive group each image did not have the same level of attractiveness. Evidence supporting this claim is seen in the pre-rating study conducted to determine the most and least attractive images. The men and women most attractive images received the number of votes including 29, 24, 31, and 29 respectively. The men and women least attractive images received the number of votes including 28, 21, 28, and 21. As you can see here, the votes for the less attractive individuals are similar where the two men images received 28 and 21 votes; same goes for the women. In contrast, the number of votes received for men and women in the attractive group were not as consistent. Furthermore, the two female images, constructed from averaging celebrities' faces appeared to have greater attractiveness due to their greater digital enhancement than the male attractive images. It is also possible that the specific individual image and mental illness pairings altered the results because they were not counterbalanced; future research could vary which descriptions are given to each image. Another limitation of this study is its generalizability. The photos used are of individuals that are within the ages of 18 and 25 and of Caucasian race, similar to the participants' range of ages. The constraints of the stimuli and participants affect the generalizability of the findings. Future studies should use a participant pool of other ages and also vary the ages represented in the images to offer greater understanding of the limitations of the physical attractiveness stereotype.

This research can be applied to many facets of clinical psychology. For instance, information on the perception of mental illness can affect how clinicians interact with their clients and how these clinicians are trained. Information about factors that affect the perception of mental illness can be presented in graduate school and continuing education trainings to inform clinicians to be mindful of such effects. This ultimately can improve the relationships

between therapists and clients. This information can also impact how mental illness is shown in society, whether it be through publicity or informational texts. Overall, the findings of this research can potentially offer understanding to many perceptions of mental illness, particularly in relation to physical attractiveness in that it may not affect the perceptions of mental illness as strongly as once believed.

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doi:10.1037/0021-843X.89.2.250

Appendix A

Scenario 1:

This female was diagnosed with schizophrenia a year ago, after being in therapy for many years. She has reported to her psychiatrist that she “feels like she is losing touch with reality”.

This female's schizophrenia largest burden has been her delusions; she firmly believes that there is someone out to get her, but she is not quite sure whom. She believes that all the bad things that happen to her have been planted by an outsider. She has explained to her psychiatrist that her best friend has attempted to sabotage her career, relationships, and happiness.

She has also had a hard time with disorganized thinking, where she has trouble organizing her thoughts and connecting them logically. A large burden at work has been her tendency to stop abruptly during a sentence. This causes much confusion between herself and her boss, coworkers, and clients.

These symptoms, as well as others, have created a strain on her professional and personal relationships.

Scenario 2:

This male was diagnosed with depression nine months ago, by his psychologist. He has told his psychologist that he's “just not interested in much anymore”.

A year ago, he began seeing his psychologist and initially went to receive help because he lost interest in many of his favorite things, didn't want to get out of bed in the morning, lost nearly twenty pounds unwillingly, and felt like he had no energy. At his first visit, he reported having the symptoms for just over a month.

He began dazing off at work, and never getting his daily workload done. He, at that point, was forced to bring it home to finish, but was always too tired to even think about finishing his work. He also reported having no energy to visit his aging parents and lost interest in his girlfriend. There was really nothing John was still interested in.

These symptoms, as well as others, have put a strain on his professional and personal relationships.

Scenario 3:

This male has suffered from schizophrenia since he was twenty-two, which he has been receiving care for.

He suffers from major hallucinations. He very often hears screaming, which causes him extreme distress and anxiety. Many other times he hears voices telling him to do things, including hurting himself.

He has also suffered from smelling different things, inaccurately. Once, he stated to have smelled something burning and called 911 in complete hysteria. Once officials came and checked out the facility, he could not control his anxiety because he just knew something was on fire.

He also suffers from a movement disorder that causes him to repeat motions over and over again.

His schizophrenia has not allowed him to make lasting relationships- both intimate and friendly. It has also hurt his immediate family relationships. He has not been able to hold a job since he was twenty.

Scenario 4:

This female suffers from depression, for which she has been dealing with for a year and a half.

In the beginning of this depressive episode she suffers from major depression symptoms such as an inability to stay asleep for more than two hours at a time, could not pay attention long enough to complete a single homework assignment, and lost interest in all of her extracurricular activities. She quit her basketball team and stopped her enrollment in Big Brother/Big Sister.

This major depressive episode also includes harmful thoughts of hurting herself and eventually she had thoughts of killing herself. She built up the courage to tell her school psychologist. Her psychologist helped her work through this, and now she is working through her lack of interest and lethargy.

Appendix B

1. How likely do you believe it is that she will be able to maintain a job?
 - 1 – Extremely unlikely
 - 2 – Unlikely
 - 3 – Neutral
 - 4 – Likely
 - 5 – Extremely likely
2. How likely do you believe it is that she will be able to have healthy relationships with others?
 - 1 – Extremely unlikely
 - 2 – Unlikely
 - 3 – Neutral
 - 4 – Likely
 - 5 – Extremely likely
3. How likely do you believe it is that she will be able to decrease how often she sees her psychiatrist? (For example, go from visiting weekly to every other week).
 - 1 – Extremely unlikely
 - 2 – Unlikely
 - 3 – Neutral
 - 4 – Likely
 - 5 – Extremely likely
4. How likely do you believe it is that she will eventually have fewer symptoms?
 - 1 – Extremely unlikely
 - 2 – Unlikely
 - 3 – Neutral
 - 4 – Likely
 - 5 – Extremely likely
5. How likely do you believe it is that she will live a normal life?
 - 1 – Extremely unlikely
 - 2 – Unlikely
 - 3 – Neutral
 - 4 – Likely
 - 5 – Extremely likely
6. How likely do you believe it is that she will be happy with her life?
 - 1 – Extremely unlikely
 - 2 – Unlikely
 - 3 – Neutral
 - 4 – Likely
 - 5 – Extremely likely
7. Does she have hope to having a normal life?
 - 1 – Extremely unlikely
 - 2 – Unlikely
 - 3 – Neutral
 - 4 – Likely
 - 5 – Extremely likely

Appendix C

Unattractive Images



Attractive Images

